UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northwest Region
7600 Sand Point Way N.E., Bldg. 1
BIN C15700
Seattle, WA 98115-0070

Refer to:
OSB2001-0311-FEC

March 25, 2002

Karyn Wood
Wallowa-Whitman National Forest
1550 Dewey Ave.
P.O. Box 907
Baker City, OR 97841

Re: Endangered Species Act Formal Section 7 Consultation and Magnuson-Stevens Act Essential Fish Habitat Consultation for the Red's Horse Ranch Trail Bridge Project, Wallowa County, Oregon

Dear Ms.Wood:

Enclosed is a biological opinion (Opinion) prepared by the National Marine Fisheries Service (NMFS) pursuant to section 7 of the Endangered Species Act (ESA) that addresses the proposed Red's Horse Ranch Trail Bridge Project, Wallowa County, Oregon. NMFS concludes in this Opinion that the proposed action is not likely to jeopardize Snake River spring/summer chinook salmon (*Oncorhynchus tshawytscha*) or Snake River steelhead (*O. mykiss*) or destroy, or adversely modify their critical habitat. This Opinion includes reasonable and prudent measures with terms and conditions that are necessary and appropriate to minimize the potential for incidental take associated with this project.

This document also serves as consultation on essential fish habitat (EFH) for chinook salmon under Public Law 104-267, the Sustainable Fisheries Act of 1996, as it amended the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). An EFH analysis is required for chinook salmon.

Questions regarding this Opinion should be directed to Ken Bronec of the Oregon Habitat Branch at 541.975.1835, extension 225.

Sincerely,

Russell M Strach for

D. Robert Lohn
Regional Administrator

cc: Mark Robertson (FWS)
Bob Mason (USFS)
Dorothy Mason (BLM)

Endangered Species Act - Section 7 Consultation
&
Magnuson-Stevens Act
Essential Fish Habitat Consultation

BIOLOGICAL OPINION

Red's Horse Ranch Trail Bridge Project, Minam River Watershed
Grande Ronde River Basin, Wallowa County, Oregon

Agency: U.S.D.A. Forest Service

Consultation Conducted By: National Marine Fisheries Service,
Northwest Region

Date Issued: March 25, 2002

Issued by: Russell M Strach for
D. Robert Lohn
Regional Administrator

Refer to: OSB2001-0311-FEC

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1. ENDANGERED SPECIES ACT

1.1 Background

The National Marine Fisheries Service (NMFS) received a letter dated November 29, 2001 from the Wallowa-Whitman National Forest (WWNF) requesting formal consultation regarding the potential effects of a foot bridge replacement across the Minam River, a tributary of the Wallowa River, on Snake River (SR) spring/summer chinook salmon and SR steelhead and their designated critical habitat. The WWNF plans to conduct the proposed action to replace a failing historic bridge near the Red's Horse Ranch administrative site, located within the Eagle Cap Wilderness, in northeast Oregon.

The WWNF has determined that SR spring/summer chinook and steelhead may occur within the project area. The proposed action is to replace an existing foot bridge across the Minam River. The existing bridge is currently closed to use by more than four horses at one time due to structural deficiencies and associated weight limits. Because of this closure, many pack strings ford the river adjacent to the bridge site rather than being separated into groups of four animals or less. Fording of the river by livestock results in increased sedimentation to the Minam River. Recreationists currently use the ford during the summer/fall use season, which includes the SR spring/summer chinook salmon spawning period.

The SR chinook salmon were listed as threatened under the ESA on April 22, 1992 (57 FS 14653) and their critical habitat was designated on December 28, 1993 (58 FR 68543). Snake River steelhead were listed as threatened under the ESA on August 18, 1997 (62 FR 43937), and critical habitat was designated February 16, 2000 (65 FR 7764). The proposed action is within designated SR chinook and steelhead critical habitat. Protective regulations were issued for SR chinook and steelhead under section 4(d) of the ESA on July 10, 2000 (65 FR 42422).

The objective of this Opinion is to determine whether the action to replace the Red's Horse Ranch Bridge across the Minam River, Wallowa County is likely to jeopardize the continued existence of SR spring/summer chinook salmon or SR steelhead, or destroy or adversely modify their critical habitat.

1.2 Proposed Action

The proposed action will remove the existing foot bridge across the Minam River adjacent to Red's Horse Ranch in the Eagle Cap Wilderness, and replace it with a structure of similar design and material. The new bridge will be placed on the existing abutments. It will be slightly wider than the existing bridge and railings will be made of wood instead of steel cable. To facilitate removal of the existing bridge and construction of the new one, a system of temporary scaffolding will be used. The metal pipe or wood (non-treated) scaffolding will be set up in the river under the existing bridge and plywood decking will be placed on the scaffolding. This will allow workers a solid platform to work from, and help prevent materials from the removal and construction phases of the bridge from entering the river. The existing bridge will be disassembled and removed and the new bridge built on the existing abutments by workers

operating from the temporary platform. The new bridge will be constructed of wood pre-treated with Pentachlorophenol (Penta) in a light hydrocarbon solvent. Forest Service trail bridge construction contracts that use treated wood are required to follow the guidelines in the *Best Management Practices for Use of Treated Wood in Aquatic Environments* (WWPI 1996). These Best Management Practices (BMPs) include requiring that all wood treated with Penta be cleaned by steaming or an expansion bath following treatment (prior to use in aquatic environments) to minimize the amount of residual treating which may occur on the treated wood surface. Newly exposed cut ends and drill holes will be treated on-site with a wood preservative. This will most likely be a 2% solution of copper napthenate, because it is the only treatment not requiring a licensed applicator. The BMPs (WWPI 1996) for copper napthenate require the following:

1. Follow the procedures outlined in AWPA[1] Standard M4, Standard for the Care of Preservative-Treated Wood Products.
2. When field treating by brushing, spraying, dipping, or soaking, do so in such a manner that the preservative does not drip or spill into the aquatic environment or into the soil.
3. Whenever possible, apply field treatments prior to assembling the structure over the body of water.
4. Conduct the application of the preservative so that any overspray or drippage of preservative can be recovered or retained.

Free flow of the Minam River would not be affected by this project except by the bases of the temporary instream scaffold support structures. Movement of instream substrate will be minimized to what is absolutely necessary to place the temporary supports for safe and efficient construction. The WWNF anticipates that the removal of the existing bridge and construction of the new bridge can be completed in one season, within the Oregon Department of Fish and Wildlife (ODFW) instream work window (ODFW 2000). This work window is July 1 to August 15 for the Minam River. However, to allow for contingencies, the WWNF is requesting an extension of the work window to September 10. The ODFW has concurred with the requested extension. The proposed action will take place in either 2002 or 2003, depending on funding availability and engineering design time lines.

Generators, compressors, and electric and air power tools will be allowed to operate on National Forest System Wilderness Lands. Gasoline powered generators and air compressors will be located at least 150 feet from the Minam River in a location approved by the WWNF. No use of gas powered tools (i.e., chainsaws) would be authorized by the WWNF. No motorized vehicles will be allowed, but "wheeled" vehicles such as wheel barrows will be permitted. Work animal stock will also be allowed. Materials will be delivered to the work area via helicopter to an approved drop zone near the Red's Horse Ranch airstrip or main lodge.

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[1] The American Wood Preservers Association is a non-profit technical organization whose purpose is to provide a link for technical exchange between industry, researchers, and users of treated wood. They are the principle standards-writing organization for the wood treating industry in the United States. Their standards are also used internationally.

Sediment input to the Minam River will be reduced during and post construction by requiring that the contractor implement an erosion control plan which meets all applicable laws and regulations and uses the following types of tools and techniques:

1. Rubber diverter/bars or similar approved structures will be temporarily installed on the trail approaching the bridge from the south prior to construction work. Long-term erosion control structures will be installed when construction activities are complete.
2. The tool storage area within the Riparian Habitat Conservation Area (RHCA) will have a screen matting to protect vegetation and prevent compaction and erosion.
3. Certified weed seed-free straw bales will be placed at both bridge approaches to minimize the possibility of sediment entering the river from site activities.

The following additional protection measures are incorporated in the project design to minimize effects to listed species and their habitat:

1. The construction contract will require storage of old chemically-treated bridge timbers to be outside of RHCAs and Wilderness. Disposal of these timbers will be at an approved hazardous waste site.
2. Construction debris will be promptly removed from the project area, RHCA and Wilderness Area.
3. Chemical treatment of any materials will be done by licensed applicators according to standard procedures as required by state law. Pre-treated materials would be used in the bridge construction, so any on-site treatment would be minimal.
4. Locations for sanitation facilities, water usage, access to work site, and camp sites will be specified in the contract to minimize effects to the RHCA.
5. Storage and use of chemicals such as gasoline or oil will be 100% contained, and at an approved site that meets Oregon Department of Environmental Quality (DEQ) requirements.
6. Any pumping from the river for fire protection purposes will be done from a previously approved (by Wallowa Mountains Zone fisheries biologist) site using a fish screen that meets NMFS guidelines.
7. Any on-site application of wood preservative would follow the guidelines in *Best Management Practices for Use of Treated Wood in Aquatic Environments* (WWPI 1996).

The existing ford being used by pack stock adjacent to the bridge will be closed as part of the proposed project. This will be done by constructing a "wing" fence which directs all traffic on to the reconstructed bridge. Erosion control structures and planting/seeding of native vegetation will be done at fording sites as necessary. The WWNF will recommend that recreationists use an existing ford approximately 0.9 miles upstream of the bridge during construction activities. This ford will be closed upon completion of the project by blocking approach trails on both river sides with native materials. Other fords exist downstream of the bridge on private land that may continue to be used by recreationists. The WWNF does not control use of fords on private land, hence they are not part of this consultation.

1.3 Biological Information and Critical Habitat

Biological information for SR steelhead is found in Busby et al. (1996) and that for SR spring/summer chinook in Mathews and Waples (1991) and is summarized in Myers et al. (1998). The Grande Ronde River, into which the Minam River flows, is one of five principal rivers in the Snake River drainage that contributes to SR salmon and steelhead production.

Critical habitat for SR salmon and steelhead encompasses the major Columbia River tributaries known to support this ESU, including the Salmon, Grande Ronde, Imnaha, Deschutes, John Day, Klickitat, Umatilla, Walla Walla, and Yakima Rivers, as well as the Columbia River and estuary. Critical habitat consists of all waterways below long-standing (more than 100 years duration) naturally-impassable barriers. The riparian zone adjacent to these waterways is also considered critical habitat. This zone is defined as the area that provides the following functions: Shade, sediment, nutrient/chemical regulation, stream bank stability, and input of large woody debris/organic matter.

Essential features of the adult spawning, juvenile rearing, and adult migratory habitat for the SR steelhead and chinook are: 1) Substrate, 2) water quality, 3) water quantity, 4) water temperature, 5) water velocity, 6) cover/shelter, 7) food, 8) riparian vegetation, 9) space, and 10) safe passage conditions. The essential features that the project may affect are substrate, water quality, water temperature, water velocity, cover/shelter, food, and riparian vegetation.

1.4 Evaluating Proposed Actions

The standards for determining jeopardy are set forth in section 7(a)(2) of the ESA as defined by 50 CFR Part 402 (the consultation regulations). NMFS must determine whether the action is likely to jeopardize the listed species and/or whether the action is likely to destroy or adversely modify critical habitat. This analysis involves the initial steps of: 1) Defining the biological requirements and current status of the listed species, and 2) evaluating the relevance of the environmental baseline to the species' current status.

Subsequently, NMFS evaluates whether the action is likely to jeopardize the listed species by determining if the species can be expected to survive with an adequate potential for recovery. In making this determination, NMFS must consider the estimated level of mortality attributable to: 1) Collective effects of the proposed or continuing action, 2) the environmental baseline, and 3) any cumulative effects. This evaluation must take into account measures for survival and recovery specific to the listed salmonid's life stages that occur beyond the action area. If NMFS finds that the action is likely to jeopardize, NMFS must identify reasonable and prudent alternatives for the action.

Furthermore, NMFS evaluates whether the action, directly or indirectly, is likely to destroy or adversely modify the listed species' designated critical habitat. NMFS must determine whether habitat modifications appreciably diminish the value of critical habitat for both survival and recovery of the listed species. NMFS identifies those effects of the action that impair the function of any essential element of critical habitat. NMFS then considers whether such impairment appreciably diminishes the habitat's value for the species' survival and recovery. If

NMFS concludes that the proposed action will destroy or adversely modify critical habitat it must identify any reasonable and prudent alternatives available.

For the proposed action, NMFS' analysis considers direct or indirect mortality of fish attributable to the action. NMFS' critical habitat analysis considers the extent to which the proposed action impairs the function of essential elements necessary for juvenile and adult migration, spawning, and rearing of the SR spring/summer chinook or steelhead under the existing environmental baseline.

1.4.1. Biological Requirements

The first step NMFS uses for applying the ESA section 7(a)(2) to listed salmon and steelhead is to define the species' biological requirements that are most relevant to each consultation. NMFS also considers the current status of the listed species taking into account population size, trends, distribution and genetic diversity. To assess the current status of the listed species, NMFS starts with the determinations made in its decision to list SR salmon and steelhead for ESA protection, and also considers new data available that is relevant to the determination.

The relevant biological requirements are those necessary for SR spring/summer chinook and SR steelhead to survive and recover to naturally reproducing population levels at which time protection under the ESA would become unnecessary. Adequate population levels must safeguard the genetic diversity of the listed stock, enhance their capacity to adapt to various environmental conditions, and allow them to become self-sustaining in the natural environment. For this consultation, the biological requirements are improved habitat characteristics that function to support successful adult and juvenile migration, spawning and rearing.

1.4.2 Environmental Baseline

The current status of SR spring/summer chinook salmon ESU has improved somewhat since being listed as threatened in 1992. In 1994 the species was proposed for listing as endangered due in part to very low numbers of adults observed at Lower Granite Dam on the lower SR. However, an improvement in the adult return levels as seen in 1997 promoted the withdrawal of the proposed change in listing status in 1998. Recent numbers show continuing improvements in adult returns, at least for some portions of the ESU. The counts at Lower Granite for spring/summer chinook were 14,320 in 1998, 6,556 in 1999, 37,755 in 2000, and 18,972 in 2001 (http://www.nwp.usace.army.mil/op/fishdata/lwrgrant.htm). Lower Granite Dam is located at river mile 107.5 on the main stem of the Snake River about 70 miles below (downstream of) the confluence of the Grande Ronde River with the Snake River.

The current range-wide status of the identified ESUs may be found in Busby et al. (1996) and Myers et al. (1998). The identified action will occur within the range of SR steelhead and SR spring/summer chinook salmon. The defined action area is the area that is directly and indirectly affected by the proposed action. The direct effects occur at the project site and may extend upstream or downstream based on the potential for impairing fish passage, hydraulics, sediment and pollutant discharge, and the extent of riparian habitat modifications. Indirect effects may

occur throughout the watershed, where actions described in this Opinion lead to additional activities, or affect ecological functions, contributing to stream degradation. As such, the action area for the proposed activities include the immediate portions of the watershed containing the project and those areas upstream and downstream that may reasonably be affected, temporarily or in the long term. For the purposed of this Opinion, the action area is defined as the streambed and riparian habitat of the Minam River 0.9 miles above the bridge site and 0.5 miles below it.

The project is in the Minam River Watershed, within the Grande Ronde River basin. The watershed covers about 244 square miles, 89% of which is managed by the Wallowa-Whitman National Forest. The Minam River originates high in the mountains and flows for most of it's length within the Eagle Cap Wilderness. It is designated a Wild River, and is a tributary of the Wallowa River, which flows into the Grande Ronde River at Rondowa, Oregon, 82 miles above it's confluence with the Snake River.

Current conditions in the Minam River are considered by the WWNF as functioning appropriately and at environmental potential. All indicators for SR chinook salmon and steelhead from NMFS' Matrix of Pathways and Indicators (MPI) are rated functioning appropriately in the subwatershed containing the proposed project area (Minam River Mile 19 at Little Minam River). The project site and all of the Minam River above it are within designated Wilderness.

1.5 Analysis of Effects

1.5.1 Effects of Proposed Actions

The effects determination in this Opinion used a method for evaluating current aquatic conditions, the environmental baseline, and predicting effects of actions on them. This process is described in the document, *Making ESA Determinations of Effect for Individual or Grouped Actions at the Watershed Scale* (NMFS 1996). The effects of proposed actions are expressed in terms of the expected effect (restore, maintain, or degrade) on aquatic habitat factors in the project area.

The proposed construction activity has the potential to directly harm juvenile fish or disturb rearing juveniles. The project is not expected to harm spawning adults. Instream work will be limited to the setting up and taking down of the support scaffolding. The work is expected to be completed prior to the onset of chinook salmon spawning. However, extension of the work window will allow construction work and use of fords during spawning. In the short term, a temporary increase of sediment and turbidity and disturbance of riparian and instream habitat is expected due to the increased use at the upstream (0.9 miles above the bridge) and private fords associated with closing of the bridge. Increases in sediment and turbidity could reduce light penetration and inhibit primary production, abrade and clog fish gills, prevent feeding by sight feeders, stop migration, and cause any fish in the area to avoid the disturbed portion of the river. The ford adjacent to the bridge will be closed as part of this project. The ford 0.9 miles upstream of the bridge site will be closed post-project. The approaches to both fords will be rehabilitated with erosion control structures and seeding as needed. Ford closure and rehabilitation will

eliminate existing sediment sources to the river. Effects of the proposed bridge replacement activities on SR spring/summer chinook and steelhead and aquatic habitat indicators will be limited by implementing protection measures included in the project design intended to avoid or minimize impacts. A request to extend the instream work window by 26 days will increase the likelihood of effects to spring/summer chinook. However, sediment inputs from the bridge work should be minimized by implementing the protection measures described in the project description.

Increased use of fords necessitated by the bridge closure will increase sediment potential and it's associated effects to SR chinook and steelhead during project construction. Based on the Red's Horse Ranch guest register, and observations from wilderness rangers, average use of the bridge in July and early August is approximately 10.7 people and 16.1 horses per weekend day. Average weekday use is approximately 6.3 people and 9.5 horses. Use numbers lower beginning in early September. This increase in fording of the river will be divided between the recommended ford 0.9 miles above the bridge site and one or two fords downstream on private land. Increased ford use during the instream work window is not expected to have a direct effect on spawning SR chinook. However, between August 15 and September 10, an estimated 200 recreationists and 300 horses would ford the Minam River during SR chinook spawning or incubation period (based on the above use-per-day figures). In the event that the project is not completed by August 15, the WWNF will survey chinook redds to check for presence of redds at the WWNF approved ford. A survey would be done as soon as chinook are observed in the area (by the caretakers of Red's Horse Ranch). A follow-up survey would be done approximately two weeks later, during the height of spawning activity. If redds are discovered, they will be protected through avoidance (i.e., flagging of approved ford).

In December 1998, NMFS issued a policy document on the use of treated wood in areas within Oregon occupied by ESA listed anadromous fish species (NMFS 1998). That document recommends a copper concentration threshold of 7 parts per billion (ppb), and a polycyclic aromatic hydrocarbon (PAH, found in creosote treated wood) concentration of 0.018 toxic units (NMFS 1998). NMFS expects that these thresholds will not be exceeded for the following reasons: 1) The dismantling of the existing bridge and construction of the new bridge will be done from a plywood platform suspended over the river, preventing wood preservatives and wood pre-treated with preservatives from entering the river; 2) the WWNF will require that materials from the dismantled bridge be stored outside of the RHCA, and disposed of at an approved toxic waste disposal site; 3) creosote treated wood will not be used in the new bridge construction; 4) the construction contractor will be required to follow the BMPs in *Best Management Practices for the Use of Treated Wood in Aquatic Environments* (WWPI 1996); and 5) the most likely wood preservative treatment to be used for any needed on-site treatment (for cut ends and drill holes) will be Copper Napthenate (2% solution) because it is the only wood preservative that can be applied without a license. The BMPs for field use of this treatment requires that none is allowed into the aquatic environment.

In the long term, the bridge will serve to decrease use of fords. Post project closure and rehabilitation of fords will also decrease potential long term sediment input. Consequently,

NMFS does not expect that the cumulative effects of this action will diminish the long-term value of the habitat for survival of SR spring/summer chinook and steelhead.

1.5.2 Cumulative Effects

Cumulative effects are defined in 50 CFR 402.2 as "those effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation." The action area is defined as the streambed and riparian habitat through the 1.4 miles of the Minam River from the upper ford, downstream to where activities associated with the project will occur. The project actions consist of replacing a foot bridge with a bridge of similar design. These activities are described in detail in the project description section above. NMFS is not aware of any significant change in non-Federal activities that are reasonably certain to occur within the action area. NMFS assumes that future State actions will continue at similar intensities as in recent years.

1.6 Conclusion

NMFS has determined based on the available information, that the proposed action is expected to cause no further degradation of stream habitat conditions within the action area over the long term. The closure of the ford at the bridge site is expected to have a beneficial effect on chinook salmon and steelhead habitat by reducing the amount of sediment introduced into the Minam River from recreation activities. As such, the proposed action covered in this Opinion is not likely to jeopardize the continued existence of SR spring/summer chinook salmon and SR steelhead. NMFS used the best available scientific and commercial data to apply its jeopardy analysis, when analyzing the effects of the proposed action on the biological requirements of the species relative to the environmental baseline, together with cumulative effects. NMFS applied its evaluation methodology (NMFS 1996) to the proposed action and found that it would cause minor, short-term adverse degradation of anadromous salmonid habitat due to sediment impacts. Because currently existing aquatic habitat conditions will be maintained or improved, there is no adverse modification or destruction of critical habitat. Direct mortality of juvenile steelhead and/or chinook may occur during the extended in-water work period of project activities, but because of protective measures incorporated in the project design, it is expected at only minor levels that would not jeopardize the listed species.

1.7 Conservation Recommendations

Section 7(a)(1) of the ESA directs Federal agencies to utilize their authorities to further the purposes of the ESA by carrying out conservation programs for the benefit of threatened and endangered species. Conservation recommendations are discretionary measures suggested to minimize or avoid adverse effects of proposed actions on listed species, to minimize or avoid adverse modification of critical habitat, or to develop additional information. NMFS has no additional conservation recommendations regarding the action addressed in this Opinion.

1.8 Reinitiation of Consultation

Consultation must be reinitiated if: 1) The amount or extent of taking specified in the Incidental Take Statement is exceeded, or is expected to be exceeded, 2) new information reveals effects of the action may affect listed species in a way not previously considered, 3) the action is modified in a way that causes an effect on listed species that was not previously considered, or 4) a new species is listed or critical habitat is designated that may be affected by the action (50 CFR 402.16). To reinitiate consultation, the WWNF must contact the Habitat Conservation Division (Oregon Habitat Branch) of NMFS, and refer to OSB2001-0311.

2. INCIDENTAL TAKE STATEMENT

Sections 4(d) and 9 of the ESA prohibit any taking (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct) of listed species without a specific permit or exemption. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, and sheltering. Harass is defined as actions that create the likelihood of injuring listed species to such an extent as to significantly alter normal behavior patterns which include, but are not limited to, breeding, feeding, migration, and sheltering. Incidental take is take of listed animal species that results from, but is not the purpose of, the Federal agency or the applicant carrying out an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to, and not intended as part of, the agency action is not considered prohibited taking provided that such taking is in compliance with the terms and conditions of this incidental take statement. An incidental take statement specifies the impact of any incidental taking of endangered or threatened species. It also provides reasonable and prudent measures that are necessary to minimize impacts and sets forth terms and conditions with which the action agency must comply in order to implement the reasonable and prudent measures.

2.1 Amount or Extent of Take

NMFS anticipates that the action covered by this Opinion is reasonably certain to result in incidental take of SR chinook salmon and steelhead because of detrimental effects from increased sediment levels (non-lethal) and the potential for incidental take during the extended in-water work window (lethal and non-lethal). These effects are not expected to have a long-term effect on chinook salmon and steelhead habitat or population levels. Based on the information in the BA, NMFS anticipates that a minor amount of incidental take (up to ten juvenile SR spring/summer chinook and/or steelhead) could occur as a result of the actions covered by this Opinion. If this threshold is exceeded, consultation must be reinitiated. The extent of take is limited to within the project area, extending 0.9 miles above the bridge site and 0.5 miles below it. Incidental take of adult SR chinook salmon nor steelhead is authorized.

2.2 Reasonable and Prudent Measures

NMFS believes that the following reasonable and prudent measures are necessary and appropriate to minimize take of SR spring/summer chinook and steelhead resulting from the action covered in this Opinion:

1. Minimize the likelihood of incidental take resulting from inwater work required to complete the project addressed in this Opinion.
2. Minimize the amount and extent of incidental take from construction activities in or near watercourses by ensuring that an effective spill prevention, containment, and control plan is developed, implemented, and maintained to avoid or minimize point-source pollution both into and within watercourses over the short and long term.
3. Minimize the likelihood of incidental take and impacts to critical habitat resulting from riparian area disturbances including removal of vegetation and disturbance of soils and sediments.
4. Complete a comprehensive monitoring and reporting program to ensure implementation of requirements found in this Opinion are implemented and effective.

2.3 Terms and Conditions

In order to be exempt from the prohibitions of section 7 of the ESA, the WWNF must comply with the following terms and conditions, which will implement the reasonable and prudent measures described above. These terms and conditions, shall be incorporated into construction contracts and subcontracts to ensure that the work is carried out in the manner prescribed. Implementation of the terms and conditions within this Opinion will further reduce the risk of impacts to fish habitat. These terms and conditions are non-discretionary.

1. To implement Reasonable and Prudent Measure #1, the WWNF shall ensure that:
   a. Project Design. The following overall project design conditions are met.
      i. Minimum area. Construction impacts will be confined to the minimum area necessary to complete the project.
      ii. Inwater work. All work within the active channel will be completed within the ODFW approved inwater work period for the Minam River, July 1 to August 15 where possible. An extension of the inwater work window is permitted to September 10, if deemed necessary by the WWNF fishery biologist.

2. To implement Reasonable and Prudent Measure #2, the WWNF shall ensure that:
   a. Pollution and erosion control plan. A Pollution and Erosion Control Plan (PECP) will be developed and implemented to prevent point-source pollution related to construction operations. The PECP will contain the pertinent elements to meet requirements of all applicable laws and regulations.

3. To implement Reasonable and Prudent Measure #3, the WWNF shall ensure that:

a. Alteration of native vegetation will be minimized. Where disturbance is necessary, native vegetation will be clipped by hand so that roots are intact. In all areas that require removal or involve mortality of riparian vegetation, re-seeding and/or replanting of vegetation with native species will occur.
b. All planting and/or seeding will be done with native vegetation as soon as possible.

4. To implement reasonable and prudent measure #4, the WWNF will submit a monitoring report to NMFS describing the WWNF's success in meeting these terms and conditions. Monitoring reports should be submitted to the Level 1 Interagency Streamlining Team for the Wallowa-Whitman National Forest by May 1 of the year following the completion of the project.

3. MAGNUSON-STEVENS ACT

3.1 Background

The objective of the essential fish habitat (EFH) consultation is to determine whether the proposed action may adversely affect designated EFH for relevant species, and to recommend conservation measures to avoid, minimize, or otherwise offset potential adverse effects to EFH resulting from the proposed action.

3.2 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (MSA), as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-297), requires the inclusion of EFH descriptions in Federal fishery management plans. In addition, the MSA requires Federal agencies to consult with NMFS on activities that may adversely affect EFH.

EFH means those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity (MSA §3). For the purpose of interpreting the definition of EFH: Waters include aquatic areas and their associated physical, chemical, and biological properties that are used by fish and may include aquatic areas historically used by fish where appropriate; substrate includes sediment, hard bottom, structures underlying the waters, and associated biological communities; necessary means the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem; and "spawning, breeding, feeding, or growth to maturity" covers a species' full life cycle (50 CFR 600.110).

Section 305(b) of the MSA (16 U.S.C. 1855(b)) requires that:

- Federal agencies must consult with NMFS on all actions, or proposed actions, authorized, funded, or undertaken by the agency, that may adversely affect EFH.
- NMFS shall provide conservation recommendations for any Federal or State activity that may adversely affect EFH.

- Federal agencies shall within 30 days after receiving conservation recommendations from NMFS provide a detailed response in writing to NMFS regarding the conservation recommendations. The response shall include a description of measures proposed by the agency for avoiding, mitigating, or offsetting the impact of the activity on EFH. In the case of a response that is inconsistent with the conservation recommendations of NMFS, the Federal agency shall explain its reasons for not following the recommendations.

The MSA requires consultation for all actions that may adversely affect EFH, and does not distinguish between actions within EFH and actions outside EFH. Any reasonable attempt to encourage the conservation of EFH must take into account actions that occur outside EFH, such as upstream and up slope activities, that may have an adverse effect on EFH. Therefore, EFH consultation with NMFS is required by Federal agencies undertaking, permitting or funding activities that may adversely affect EFH, regardless of its location.

3.3 Identification of EFH

The Pacific Fisheries Management Council (PFMC) has designated EFH for federally-managed fisheries within the waters of Washington, Oregon, and California. The designated EFH for groundfish and coastal pelagic species encompasses all waters from the mean high water line, and upriver extent of saltwater intrusion in river mouths, along the coasts of Washington, Oregon and California, seaward to the boundary of the U.S. exclusive economic zone (370.4 km)(PFMC 1998a, 1998b). Freshwater EFH for Pacific salmon includes all those streams, lakes, ponds, wetlands, and other water bodies currently, or historically accessible to salmon in Washington, Oregon, Idaho, and California, except areas upstream of certain impassable man-made barriers (as identified by the PFMC), and longstanding, naturally-impassable barriers (i.e., natural waterfalls in existence for several hundred years) (PFMC 1999). In estuaries and marine areas, designated salmon EFH extends from the near shore and tidal submerged environments within state territorial waters out to the full extent of the exclusive economic zone (370.4 km) offshore of Washington, Oregon, and California north of Point Conception to the Canadian border.

Detailed descriptions and identifications of EFH for salmon are found in Appendix A to Amendment 14 to the Pacific Coast Salmon Plan (PFMC 1999). Assessment of the potential adverse effects to these species' EFH from the proposed action is based on this information.

The PFMC has designated EFH for three species of Pacific salmon: chinook (*Oncorhynchus tshawytscha*); coho (*O. kisutch*); and Puget Sound pink salmon (*O. gorbuscha*)(PFMC 1999). Freshwater EFH for Pacific salmon includes all those streams, lakes, ponds, wetlands, and other water bodies currently, or historically accessible to salmon in Washington, Oregon, Idaho, and California, except areas upstream of certain impassable man-made barriers (as identified by the PFMC), and longstanding, naturally- impassable barriers (i.e., natural waterfalls in existence for several hundred years). Detailed descriptions and identifications of EFH for salmon are found in Appendix A to Amendment 14 to the Pacific Coast Salmon Plan (PFMC 1999). Assessment of

potential adverse effects to these species' EFH from the proposed action is based on this information.

3.4 Proposed Actions

The proposed actions are detailed above in section 1.1. The action area includes 1.4 miles of the Minam River. This area has been designated as EFH for various life stages of SR spring/summer chinook.

3.5 Effects of Proposed Action

As described in detail in ESA portion of this consultation**,** the proposed activities may result in detrimental short-term adverse effects to a variety of habitat parameters.

3.6 Conclusion

NMFS believes that the proposed action may adversely affect the EFH for SR spring/summer run chinook salmon.

3.7 EFH Conservation Recommendations

Pursuant to section 305(b)(4)(A) of the Magnuson-Stevens Act, NMFS is required to provide EFH conservation recommendations for any Federal or state agency action that would adversely affect EFH. The conservation measures proposed for the project by the BPA, all of the Reasonable and Prudent Measures and the Terms and Conditions contained in Sections 2.2 and 2.3 are applicable to salmon EFH. Therefore, NMFS incorporates each of those measures here as EFH recommendations.

3.8 Statutory Response Requirement

Please note that the Magnuson-Stevens Act (section 305(b)) and 50 CFR 600.920(j) requires the WWNF to provide a written response to NMFS after receiving EFH conservation recommendations within 30 days of its receipt of this letter. This response must include a description of measures proposed by the agency to avoid, minimize, mitigate or offset the adverse impacts of the activity on EFH. If the response is inconsistent with a conservation recommendation from NMFS, the agency must explain its reasons for not following the recommendation.

3.9 Consultation Renewal

The WWNF must reinitiate EFH consultation with NMFS if either action is substantially revised or new information becomes available that affects the basis for NMFS' EFH conservation recommendations (50 CFR 600.920).

4. LITERATURE CITED

Section 7(a)(2) of the ESA requires biological opinions to be based on "the best scientific and commercial data available." This section identifies the data used in developing this Opinion.

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